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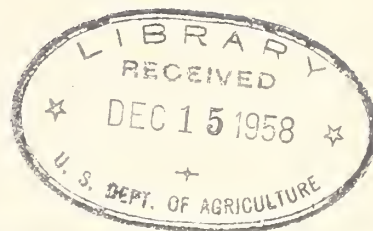
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# ROGUE RIVER WATERSHED

## WATER SUPPLY OUTLOOK

as of

APRIL 1, 1954



U. S. SOIL CONSERVATION SERVICE and OREGON AGRICULTURAL EXPERIMENT STATION

### S U M M A R Y

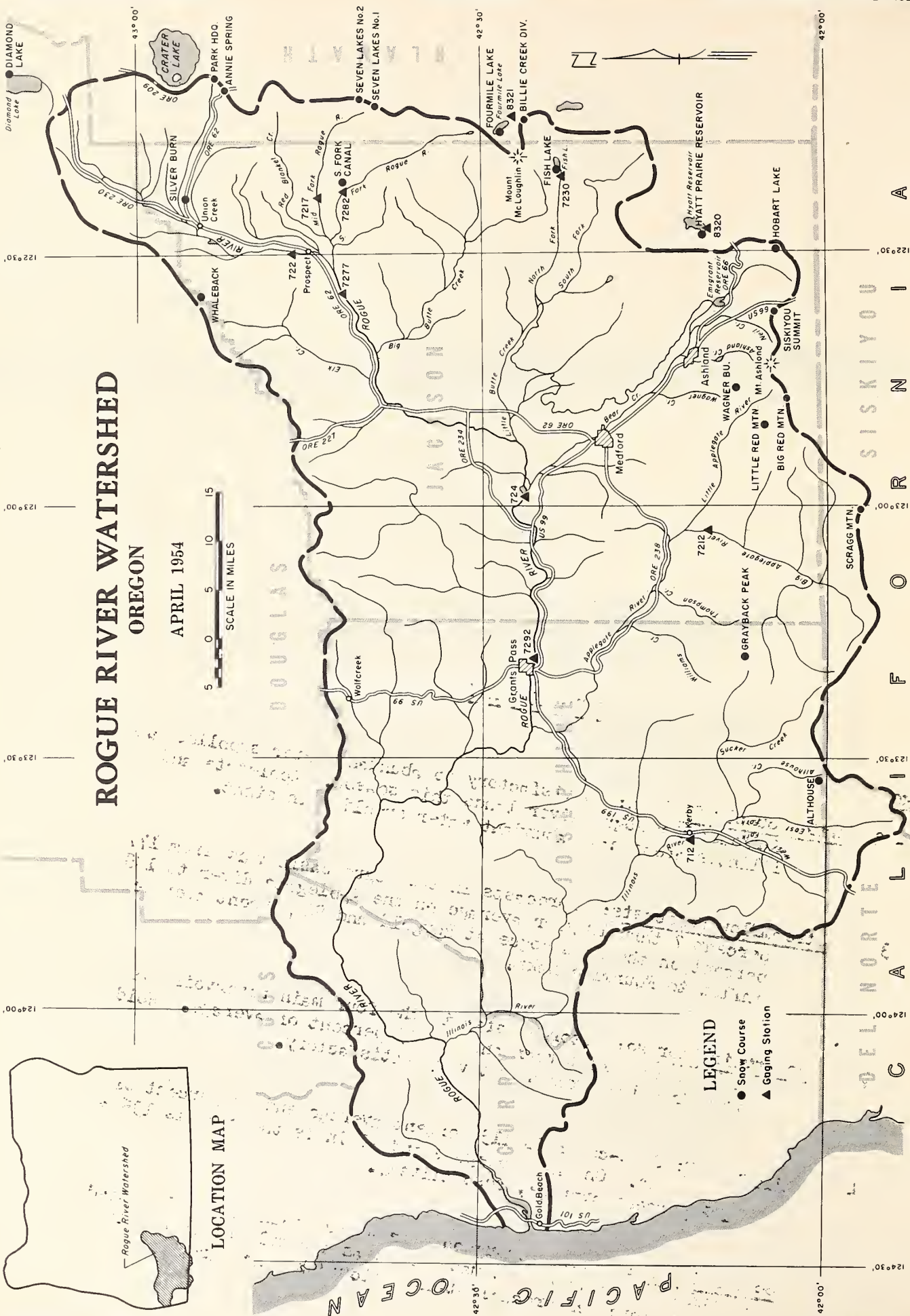
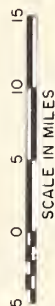
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- 1 - 2 Water Supply Outlook: Satisfactory to abundant water supplies are forecast for Rogue River lands this season. Applegate and Illinois areas have abundant water supplies in sight.
- 3 Streamflow Forecasts: Forecasts in the Rogue Basin vary from 177 percent ~~7~~ <sup>10</sup> year average on the Applegate River to 108 percent on the main Rogue at Roygold and 92 percent average inflow to Fourmile Lake.
- 3 Reservoir Storage: Stored water in the four main reservoirs is greater than last year and is 173 percent of average. Hold over from last season was very satisfactory.
- 4 Snow-Cover: Snow-cover is 113 percent average and 93 percent of last year. On the Applegate and Illinois the snow is 135 and 122 percent average, respectively.
- 4 Soil Moisture: Soils throughout the Rogue Basin are well wetted and even saturated in many areas as a result of extremely heavy November precipitation followed by the warm, open winter.

# ROGUE RIVER WATERSHED OREGON

APRIL 1954

LOCATION MAP



WATER SUPPLY OUTLOOK - For April-September, 1954<sup>a</sup>

| Source of Water                  | Acreage<br>Irrigated | Outlook   |
|----------------------------------|----------------------|---|
| Althouse Creek                   | 250                  | Above average water supplies.   |
| Ashland Creek                    | 302                  | Water supplies should be well above average. Snow-cover is greater than 1953.   |
| Applegate River (Big)            | 6,687                | Abundant water supplies are in sight due to the heavy snow-cover which is 135 percent average. Soils are very wet in the watersheds.  |
| Applegate River (Little)         | 644                  | Adequate water will come from the very heavy snow-pack.   |
| Bear Creek                       | 375                  | Adequate water for irrigation.  |
| Butte Creek (Big)                | 5,222                | Eagle Point Irrigation District will have adequate water this season. Snow-cover is slightly below that of last year but is well above average.   |
| Elk Creek                        | 136                  | Adequate water for irrigation.  |
| Evans Creek                      | 800                  | Adequate water for all the usual irrigation. Soils well wetted.   |
| Fourmile and Fishlake Reservoirs | 13,183               | Medford and Rogue River Valley Irrigation Districts will have adequate water supplies. Fourmile Lake is spilling already and inflow to Fish Lake reservoir is expected to be equal to the 10 year average, 1942-51. The soil in the watersheds are well wetted. |
| Grave Creek                      | 125                  | Adequate water for irrigation.  |
| Hyatt and Emigrant Reservoirs    | 10,317               | Talent Irrigation District will have adequate water supplies with inflow to Hyatt Lake expected to be 112 percent of the 10 year average. Hyatt will fill by mid-April and Emigrant is already full.  |

a - Assuming normal meteorological conditions during the April - September period.



WATER SUPPLY OUTLOOK (Contd.)

| Source of Water           | Acreage<br>Irrigated | Outlook  |
|---------------------------|----------------------|--|
| Illinois River            | 400                  | Abundant water supplies.   |
| Illinois River, East Fork | 900                  | Abundant water supplies.<br>Snow-pack is 122 percent average.  |
| Illinois River, West Fork | 200                  | Abundant water supplies.   |
| Jump-off Joe Creek        | 210                  | Adequate for usual irrigation.   |
| Neil Creek                | 1,178                | Water supplies should be well above average. Snow-cover is 112 percent of last year and 132 percent average.   |
| Red Blanket Creek         | 313                  | Adequate for usual irrigation.   |
| Rough and Ready Creek     | 200                  | Adequate for usual irrigation.   |
| Rogue River               | 14,088               | Adequate water for 1954 season. Snow-cover is 107 percent average and 91 percent of last year. Grants Pass Irrigation District can expect low flow of river to remain high enough that no regulation will be necessary. Discharge of main Rogue above Prospect will be 111 percent average; Middle Fork will be 100 percent and the South Fork will be 103 percent. Snow-cover at Annie Spring is 107 percent average. |
| Slate Creek               | 200                  | Adequate for usual irrigation.   |
| Sucker Creek              | 1,042                | Abundant water supplies. Present snow-cover is well above average and soils are very wet under snow.   |
| Thompson Creek            | 861                  | Adequate for usual irrigation.<br>Snow-cover well above average.   |
| Wagner Creek              | 145                  | Adequate water- McDonald Ditch will flow all or most of the season.  |
| Williams Creek            | 720                  | Adequate for usual irrigation.   |

STREAMFLOW FORECASTS<sup>a</sup> - As of April 1, 1954

| Gaging Station |                                       | Seasonal Streamflow in 1000 a.f. |          |         | 1954        |
|----------------|---------------------------------------|----------------------------------|----------|---------|-------------|
| No.            | Name                                  | Forecast 1954                    |          | Avg.    | as % of Avg |
|                |                                       | Apr:Sept.                        | Apr-July | 1942-51 |             |
| 7212           | Applegate R., nr. Ruch                | 198.0                            | — —      | 111.7   | 177         |
| 8321           | Fourmile Lake net Inflow*             | 7.0                              | — —      | 7.6     | 92          |
| 8320           | Hyatt Res. net Inflow*                | 6.4                              | — —      | 5.7     | 112         |
| 712            | Illinois R., nr. Kerby                | 213.0                            | — —      | 177.9   | 120         |
| 7230           | L. Butte Cr., N. Fk., below Fish Lk.* | 15.3                             | — —      | 15.3    | 100         |
| 722            | Rogue R., abv. Prospect*              | 357.0                            | — —      | 320.3   | 111         |
|                | Rogue R., abv. Prospect*              | — —                              | 308.0    | 267.8   | 115         |
| 7217           | Rogue R., M. Fk., nr. Prospect*       | 76.0                             | — —      | 76.1    | 100         |
|                | Rogue R., M. Fk., nr. Prospect*       | — —                              | 60.0     | 60.2    | 100         |
| 7282           | Rogue R., S. Fk., nr. Prospect*       | 80.0                             | — —      | 77.9    | 103         |
|                | Rogue R., S. Fk., nr. Prospect*       | — —                              | 69.0     | 66.5    | 104         |
| 7277           | Rogue R., below South Fork            | 730.0                            | — —      | 686.5   | 106         |
|                | Rogue R., below South Fork            | — —                              | 610.0    | 557.2   | 109         |
| 724            | Rogue R., at Raygold nr. Central P.   | 990.0                            | — —      | 922.8   | 108         |
|                | Rogue R., at Raygold nr. Central P.   | — —                              | 850.0    | 766.2   | 111         |
| 7292           | Rogue R., at Grants Pass              | 950.0                            | — —      | 878.7   | 108         |

\* Corrected to natural flow

RESERVOIR STORAGE

| Reservoir               | Usable Capacity<br>1000 a.f. | Thousand a.f. in storage about April 1, 1954 |      |                        |                             |
|-------------------------|------------------------------|--|------|------------------------|-----------------------------|
|                         |                              | 1954   | 1953 | 10 yr. Avg.<br>1942-51 | 1954 as % of<br>10 Yr. Avg. |
| Emigrant Gap            | 8.3                          | 8.3  | 8.3  | 7.9                    | 105                         |
| Fish Lake               | 7.8                          | 7.0  | 6.8  | 4.9                    | 143                         |
| Fourmile Lake           | 16.1                         | 15.1   | 14.7 | 7.0                    | 216                         |
| Hyatt Prairie           | 16.1                         | 14.5   | 13.2 | 6.2                    | 234                         |
| Total<br>(4 Reservoirs) | 48.3                         | 44.9   | 43.0 | 26.0                   | 173                         |

SNOW COVER - As of April 1, 1954

| Snow Course               |                 | 1954  |                 | Water Content (in) 1954 |         | 1953        | 1954 |
|---------------------------|-----------------|-------|-----------------|-------------------------|---------|-------------|------|
| No.                       | Name            | Elev. | Snow Depth (in) | Water Content (in)      | Average | as % of Avg |      |
| - below 4000' -           |                 |       |                 |                         |         |             |      |
| 7219                      | Silver Burn     | 3720' | 0.0             | 0.0                     | 0.0     | 11.4        | 0    |
| 7218                      | S.Fk. Canal     | 3500' | 32.7            | 14.3                    | 16.9    | 11.7        | 122  |
|                           | Average         |       | —               | 7.2                     | 8.4     | 6.6         | 109  |
| - 4000' to 6000' -        |                 |       |                 |                         |         |             |      |
| 7216                      | Althouse        | 4400' | 16.7            | 5.1                     | 5.8     | 7.6         | 67   |
| 722                       | Billie Cr. Div. | 5300' | 54.4            | 20.3                    | 24.6    | 22.4        | 91   |
| 743                       | Diamond Lake    | 5315' | 65.7            | 28.0                    | 32.5    | 20.4        | 137  |
| 725                       | Fish Lake       | 4865' | 32.4            | 12.4                    | 14.2    | 12.5        | 99   |
| 7221                      | Hobart Lake     | 5010' | 18.4            | 8.9                     | 6.2     | 6.3         | 141  |
| 723                       | Hyatt Pr. Res.  | 4900' | 27.3            | 12.4                    | 12.2    | 9.2         | 135  |
| 728                       | Siskiyou Sum.   | 4630' | Snow Removed    |                         | —       | 4.0         | —    |
| 7217                      | Whaleback       | 5190' | 89.1            | 39.9                    | 42.8    | 36.0        | 111  |
|                           | Average         |       | —               | 18.1                    | 19.8    | 16.3        | 111  |
| - Above 6000' -           |                 |       |                 |                         |         |             |      |
| 831                       | Annie Spring    | 6018' | 115.6           | 47.8                    | 56.5    | 44.6        | 107  |
| 729                       | Big Red Mtn.    | 6500' | 102.3           | 42.6                    | 42.8    | 30.1        | 142  |
| 7223                      | Fourmile Lake   | 6000' | 62.1            | 25.6                    | 32.4    | 32.4        | 79   |
| 727                       | Grayback Pk.    | 6000' | 76.0            | 36.4                    | 32.6    | 26.4        | 138  |
| 7210                      | Little Red Mtn. | 6500' | 74.7            | 32.9                    | 34.6    | 23.5        | 140  |
| 838                       | Park Hdgs.      | 6450' | 145.5           | 63.6                    | 69.6    | 65.2        | 98   |
| 7220                      | Scragg Mtn.     | 6200' | 74.2            | 37.6*                   | 39.5    | 30.1        | 125  |
| 7211                      | Seven Lakes #1  | 6800' | 153.0           | 65.9                    | 70.2    | 57.6        | 114  |
| 7212                      | Seven Lakes #2  | 6200' | 104.1           | 45.1                    | 48.2    | 42.8        | 105  |
| 7213                      | Wagner Butte    | 6900' | 55.9            | 23.4                    | 19.9    | 17.7        | 132  |
|                           | Average         |       | —               | 42.1                    | 44.6    | 37.0        | 114  |
| Average (19 Snow Courses) |                 |       | —               | 29.6                    | 31.7    | 26.2        | 113  |

\* Partly estimated

SOIL MOISTURE

| Soils in:     | Fall Status    | Current status as of April 1, 1954 |
|---------------|----------------|------------------------------------|
| Lower Valleys | Well Saturated | Well Saturated                     |
| Upper Valleys | Well Saturated | Well Saturated                     |
| Mountains     | Well Saturated | Well Saturated                     |